



THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applicant:

Eric C. Hannah et al.

Serial No.: 09/690,512

Filed: October 17, 2000

For: Ensuring that Advertisements
are Played

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Art Unit: 3622

Examiner: Stephen M. Gravini

Atty Docket: ITL.0482US
P10030

Patricia Lewis
#8/appral
Brief
& fee
10.29.03

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Commissioner for Patents
P.O. Box 1450
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APPEAL BRIEF

Sir:

Applicant respectfully appeals from the final rejection mailed July 22, 2003.

I. REAL PARTY IN INTEREST

The real party in interest is the assignee Intel Corporation.

II. RELATED APPEALS AND INTERFERENCES

None.

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Date of Deposit: October 20, 2003

I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as **first class mail** with sufficient postage on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Cynthia L. Hayden
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III. STATUS OF THE CLAIMS

Claims 1-7, 9, 11-17, 19, and 21-30 are rejected. Each rejection is appealed.

IV. STATUS OF AMENDMENTS

All amendments have been entered.

V. SUMMARY OF THE INVENTION

Referring to Figure 1, a processor-based system 10 may include a media player 60 that plays electronic content. Coupled to the digital-to-analog converter 26 is a watermark detector 60. The watermark detector 60 detects whether watermarks present in the content received from a content provider are actually played as intended. For example, the watermark detector 60 may detect whether the watermarked material is played in full at the predetermined play speed and is not otherwise muted, masked, fast-forwarded or stripped from the content. The watermark detector 60 may be coupled to the media player 60 to control the play of content on the media player 60. Thus, content may not be played through the system 10 unless certain advertising material containing a watermark is played as originally intended. See specification at page 3, line 5 through page 4, line 20.

The watermark may be a faint signal that is embedded in the advertising content, that is unstrippable and may not be degraded without degrading the desired content to an unacceptable extent. The faint signal may be designed to be undetectable by users. Watermarks are commonly used with content to protect them from being digitized or re-sampled in the output/analog domain for resubmission to players as “copy always” material. Thus, watermarks are traditionally used to prevent or reveal theft of proprietary material.

These same watermarks may also be detected by the watermark detector 60 to ensure that watermarked advertising material is played as originally intended. Thus, advertising material that includes a watermark with an appropriate security code may be detected by the watermark detector 60. The watermark detector 60 may determine the fidelity of the watermark and the time when the watermark is activated. The detector 60 may ensure that the advertising material is not fast forwarded or otherwise altered.

The watermark detector 60 may directly monitor the video or audio input/output channels to ensure that the channels correctly extract the advertising watermark if, and only if, the advertising is played by the digital output channel at the proper rate and for the duration of the advertising, with no extraneous masking. The extracted advertising security code or watermark is then returned to a media player application to allow decryption of the remaining content by the media player 60.

Alternatively, the watermark may be utilized to accrue digital coupons in return for playing the advertising. That is, instead of only controlling the play of content, the detection of the watermarks in the advertising may also be used to accrue rewards or benefits to users who actually play the advertisements as originally designed. See specification at page 4, line 21 through page 6, line 3.

As still another example, the watermark may be extracted and a security code may be parsed from the watermark. This information may be combined by the processor-based system 10 with an identifier for a particular user. Thus, the advertisement together with the user identifier may be collected for market research purposes.

The watermark detector 60 may be utilized with content that is recorded on a medium such as a magnetic disk as well as content that is received with the watermark over an

appropriate distribution network, such as the Internet, or even a television distribution network such as an airwave, cable or satellite network.

Turning to Figure 2, the software 90 stored on the storage 66, in accordance with one embodiment of the present invention, may initially determine whether the time for a commercial has arrived, as indicated in diamond 92. In one embodiment, commercials may be inserted at predetermined times. In such case, the software 90 may begin by determining if a commercial insertion time has arrived. In other embodiments in which the commercials are provided automatically, for example, before the content is actually played, the act illustrated by the diamond 92 may be unnecessary.

Once it has been determined that there is reason to monitor the play of a commercial, a check at diamond 94 determines whether the detector flag has been set. The detector flag may be set by the watermark detector 60 when the watermark detector 60 determines that a commercial has been played appropriately. This may include determining whether the commercial is played for the desired amount of time and at the desired speed. See specification at page 6, line 4 through page 7, line 10.

This determination that the commercial was played correctly may be based on stored, predetermined characterizing information for all or a variety of commercials. For example, it may be known that all commercials have a predetermined speed and a predetermined duration. Alternatively, the watermark detector 60 may access a database either on the system 10 or externally thereof to determine the characteristics of a given commercial, for example, in a given piece of content, or at a given time. The watermark detector 60 may then compare that information to what is actually detected through the digital-to-analog converter 26.

In any case, if the detector 60 determines that the advertisement has been correctly played, in one embodiment of the present invention, it may set a flag for the software 90 to detect. When the flag setting is detected, the software 90 reports a play validation as indicated at block 96. In other words, the software 90 may report to external sources that the advertisement was actually played by a given processor-based system 10 as intended. This feedback to the advertiser may provide confirmation that in fact the advertising program is being executed as intended. It may also be utilized to develop statistics in some embodiments.

Next, in some embodiments, the advertisement identifier may be added to a particular user's profile as indicated in block 98. A user profile may be developed for everyone who uses a given processor-based system 10. This profile may be developed by requiring a password to begin using the system 10. As a result, a profile may be developed indicating which commercials are viewed by particular users.

This user profile information may be utilized to award credits, points, or rewards to particular users based on their commercial viewing practices. In addition, the profile may be provided to marketing operations for targeted advertisements for particular users. See specification at page 7, line 11 through page 8, line 21.

VI. ISSUES

- A. Are the Claims Unpatentable Under 35 U.S.C. § 101?**
- B. Are the Claims Indefinite Under § 112 First Paragraph?**
- C. Are the Claims Indefinite Under § 112 Second Paragraph?**
- D. Is Claim 1 Anticipated by Any One of a Variety of References?**
- E. Is Claim 21 Anticipated by Any One of a Variety of References?**

- F. Is Claim 1 Obvious Over the Examiner's Personal Experience?**
- G. Is Claim 21 Obvious Over the Examiner's Personal Experience?**
- H. Are the Claims Subject to a Double Patenting Rejection?**
- I. Is Claim 5 Anticipated by the Prior Art?**
- J. Is Claim 6 Anticipated by the Prior Art?**
- K. Is Claim 8 Anticipated by the Prior Art?**
- I. Is Claim 9 Anticipated by the Prior Art?**

VII. GROUPING OF THE CLAIMS

Claims 2-4, 7, 11-14, 17, and 21-24 may be grouped with claim 1.

Claims 15 and 25 may be grouped with claim 5.

Claim 16 may be grouped with claim 6.

Claim 17 may be grouped with claim 8.

Claims 19 and 21-30 may be grouped with claim 9.

VIII. ARGUMENT

A. Are the Claims Unpatentable Under 35 U.S.C. § 101?

The Examiner rejected claims 1-7, 9, 11-17, 19, and 27-30 under 35 U.S.C. § 101 because the claimed method does not recite a useful, concrete and tangible result. However, 35 U.S.C. § 101 recites no requirement that the claimed invention be performed with interaction of a physical structure. "The plain and unambiguous meaning of section 101 is that any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may be patented if it meets the requirements for patentability set forth in

Title 35, such as those found in sections 102, 103, and 112.” See M.P.E.P. § 2106. The use of the expansive term “any” in section 101 represents Congress's intent not to place any restrictions on the subject matter for which a patent may be obtained beyond those specifically recited in section 101 and the other parts of Title 35.... Thus, it is improper to read into section 101 limitations as to the subject matter that may be patented [(e.g., a “physical structure”)] where the legislative history does not indicate that Congress clearly intended such limitations.” *Id.*

The Examiner broadly construed a watermark to encompass any mark included with an advertisement. However, a digital watermark is defined as “a pattern of bits embedded into a file used to identify the source of illegal copies....” See Computer Desktop Encyclopedia, 9th ed., McGraw-Hill, pp. 249-250 (copy attached). See also, p. 4, line 21 through p. 5, line 4 of the specification. The Applicants, therefore, contend that the definition applied by the Examiner is unreasonably broad in light of the definition that would be understood by one skilled in the art.

The Examiner suggests that the claimed invention is not patentable because a watermark is an abstract idea. However, a watermark is not an idea. It is an industry recognized embedded bit pattern.

B. Are the Claims Indefinite Under § 112 First Paragraph?

The Examiner rejected claims 1-7, 9, 11-17, 19, and 21-30 under 35 U.S.C. § 112, first paragraph, as being indefinite. Specifically, the Examiner stated that the specification discusses the claimed concept but does not enable one skilled in the art to make and/or use the invention with respect to monitoring a watermark and accruing a credit. Figure 1 shows a block diagram of a processor-based system 10 in which “the watermark detector 60 may directly monitor the video or audio input/output channels to ensure that the channels correctly extract the advertising watermark if, and only if, the advertising is played by the digital output channel at the proper rate

and for the duration of the advertising, with no extraneous masking.” See p. 5, lines 15-20. The specification goes on to explain that “alternatively, the watermark may be utilized to accrue digital coupons in return for playing the advertising.” See p. 5, lines 24-25. The provision of a watermark detector must be well known to those skilled in the art as they are used to detect digital watermarks for detecting counterfeits.

C. Are the Claims Indefinite Under § 112 Second Paragraph?

The Examiner further rejected claims 1-7, 9, 11-17, 19, and 21-30 under 35 U.S.C. § 112, second paragraph, as being indefinite. However, “a rejection based on failure to [set forth the subject matter that the Applicants regard as their invention] is appropriate only where [the Applicants have] stated, somewhere other than in the application as filed, that the invention is something different from what is defined by the claims.” See M.P.E.P. §§ 2171-2172. The Applicants have made no such statement. Therefore, the rejection cannot stand.

The Examiner asserts that the specification does not provide an antecedent basis for the steps included in the independently claimed method and system. However, “a claim term which has no antecedent basis in the disclosure is not necessarily indefinite.... There is no requirement that the words in the claim must match those used in the specification disclosure. Applicants are given a great deal of latitude in how they choose to define their invention so long as the terms and phrases used define the invention with a reasonable degree of clarity.” See M.P.E.P. § 2173.05(e). Nevertheless, the language from the claims is used in the specification as pointed out above.

The Examiner stated that the independently claimed recitation “said watermark detects watermarks” is considered indefinite because it is unclear how a symbol detects a plurality of itself. However, the recitation was merely a typographical error, and independent claim 21, the

only claim to include such language, was amended in a previous response. The currently pending claims do not include the phrase “said watermark detects watermarks.”

D. Is Claim 1 Anticipated by Any One of a Variety of References?

Independent claim 1 stands rejected under 35 U.S.C. § 102(a) as being anticipated by the Applicants’ specification, under 35 U.S.C. § 102(b) as being anticipated by Filepp, et al., U.S. Pat. No. 5,347,642 (hereinafter “Filepp”), Hannah, U.S. Patent No. 5,550,595 (hereinafter “Hannah 1”), Hannah, U.S. Patent No. 5,568,192 (hereinafter “Hannah 2”), Fite, et al., U.S. Patent No. 5,557,721 (hereinafter “Fite”), Graber, et al., U.S. Patent No. 5,717,860 (hereinafter “Graber”), Von Kohorn, U.S. Patent No. 5,916,024, and Merriman, et al., U.S. Patent No. 5,948,061 (hereinafter “Merriman”), and under 35 U.S.C. § 102(e) as being anticipated by d'Eon, et al., U.S. Patent No. 6,006,197 (hereinafter “d'Eon”), Goodman, et al., U.S. Patent No. 6,173,271 (hereinafter “Goodman”), Rhoads, U.S. Pat. No. 6,311,214 (hereinafter “Rhoads 1”), Zhang, et al., U.S. Patent No. 6,325,420 (hereinafter “Zhang”), and Rhoads, et al., U.S. Patent No. 6,442,285 (hereinafter “Rhoads 2”).

The Examiner asserted that under current Office practice a watermark may be any indicia that can identify an advertisement. As demonstrated above this definition is inconsistently broader than how the term is defined in a technical dictionary. Neither the Applicants’ own specification, Filepp, Hannah 1, Hannah 2, Fite, Graber, Merriman, d'Eon, nor Rhoads 1 makes any mention of monitoring a watermark included with an advertisement. These references do not teach or suggest monitoring “a pattern of bits embedded into a file.” In fact, these references make no mention of an advertisement at all.

Von Kohorn fails to teach or suggest monitoring a watermark. In Von Kohorn, although an audience member’s response to a task or situation may be used to determine a score for an

audience member, the instructional signal itself is not monitored. The Examiner failed to address this argument in his office action.

Goodman fails to teach or suggest associating an indication that an advertisement was played with an identifier for a particular user. In Goodman, each commercial is played by the television station including a secure identification. That identification is received, date and time confirmed, and verified. The information is sent to a billing computer. In Goodman, no mention is made of associating an indication that an advertisement was played with an identifier for a particular user.

Zhang fails to teach or suggest monitoring a watermark. In Zhang, the print control signal is merely read by the printing system. No mention is made of monitoring a watermark included with an advertisement. The Examiner failed to address this argument in his office action.

Rhoads 2 merely describes reconfiguring a watermark detector. Rhoads 2 fails to teach or suggest associating an indication that an advertisement was played with an identifier for a particular user. The Examiner failed to address this argument in his office action.

E. Is Claim 21 Anticipated by Any One of a Variety of References?

Independent claim 21 stands rejected under 35 U.S.C. § 102(a) as being anticipated by the specification, under 35 U.S.C. § 102(b) as being anticipated by Filepp, Hannah 1, Hannah 2, Fite, Graber, Von Kohorn and Merriman, and under 35 U.S.C. § 102(e) as being anticipated by d'Eon, Goodman, Rhoads 1, Zhang and Rhoads 2.

However, all of these references fail to teach or suggest a watermark detector to control operation of a media player in response to detection of a watermark. The Examiner failed to address this argument in his office action.

F. Is Claim 1 Obvious Over the Examiner's Personal Experience?

The Examiner rejected claims 1-7, 9, 11-17, 19, and 21-30 under 35 U.S.C. § 103(a) as being obvious over the Examiner's personal experience. Specifically, the Examiner states that the term "watermark" is non-functional descriptive language that is merely information, symbols, or data items necessary to provide an accounting for establishing and maintaining an information basis in the field of endeavor claimed by the Applicants. The Applicants respectfully disagree because, as stated above, a watermark has a well accepted technical definition.

The Examiner's personal experience fails to teach or suggest associating an indication that an advertisement was played with an identifier for a particular user. The Examiner asserts that a particular user identifier is a term common in the field of television viewing. However, the Examiner has failed to show how viewing a television advertisement associates an indication that the advertisement was played with an identifier for a particular user. Television viewing does not involve an identifier for a particular user. The television advertisement is merely played and viewed by those who choose to watch the advertisement. In the field of television viewing, no indication is associated with an identifier for a particular user.

G. Is Claim 21 Obvious Over the Examiner's Personal Experience?

Independent claim 21 calls for a watermark detector to detect a watermark included with an advertisement and to control operation of the media player in response to detection of the watermark. The Examiner's personal experience fails to teach or describe a watermark detector.

As stated above, a watermark is a well understood term not encompassed by the Examiner's personal experience. The Examiner merely points to his experience with an advertisement that does not include a pattern of embedded bits. In the absence of a watermark,

the Examiner's personal experience fails to teach or suggest a watermark detector to detect a watermark included with an advertisement. Moreover, the Examiner's personal experience fails to teach or suggest a watermark detector to control operation of the media player in response to detection of a watermark.

The Examiner states that the motivation to combine the Applicants' claimed invention with the services offered by the Examiner's experience with television viewing is to allow greater consumer targeting capabilities through electronic mediums, while transferring information. However, "the mere fact that references can be combined or modified does not render the resulting combination obvious unless the prior art also suggests the desirability of the combination." See M.P.E.P. § 2143.01 "The Fact that References can be Combined or Modified is not Sufficient to Establish *Prima Facie* Obviousness," at page 2100-124. "Although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.'" *Id.*

Here, the rejection amounts to a statement that it was possible to do what the Applicants did. Surely the Applicants must agree with that because, in fact, they did do it. For example, the Examiner's argument that the combination may allow greater consumer targeting capabilities through electronic mediums while transferring information may be true, but is irrelevant to the obviousness determination. As explained in the M.P.E.P., the fact that references can be combined or modified is irrelevant, absent some teaching of the desirability to do so. It is the teaching of the desirability to do so which is clearly absent in the Examiner's proposed combination. Therefore, the Examiner's argument cannot stand.

Clearly, if the "could" standard were the standard of patentability, nothing would ever be patentable because, obviously, in order to enable the invention it must be possible to make it. If

it is possible to make it, there must be art that would teach the elements used to make the combination. However, something in the prior art must teach the desirability of the combination in order to render the combination obvious under our system.

H. Are the Claims Subject to a Double Patenting Rejection?

The Examiner provisionally rejected claims 1-7, 9, 11-17, 19, and 21-30 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of copending Application No. 09/896,772. The Examiner states that both applications perform substantially the same function using substantially the same means with substantially the same result. The Applicants respectfully disagree because the two applications do not perform substantially the same function, and they do not use substantially the same means.

Application No. 09/896,772 has nothing to do with watermarks. The two applications, therefore, do not perform substantially the same function. The two applications do not use substantially the same means because Application No. 09/896,772 uses a ping signal, which does not include an embedded pattern of bits and is not itself embedded into another signal; whereas, in the present patent application, a watermark that is included with an advertisement is monitored or detected.

I. Is Claim 5 Anticipated by the Prior Art?

Claim 5 was also rejected over the Applicants' own background. Plainly this rejection is meritless since there is nothing in the background that in any way anticipated claim 5.

For the same reason, claim 5 is not anticipated by any of the other numerous references which go effectively unanalyzed in the office action.

J. Is Claim 6 Anticipated by the Prior Art?

Claim 6 calls for monitoring the watermark included with a recorded advertisement.

Again, there is nothing in any of the cited references which in any way could possibly be taken as anticipating claim 6.

Therefore, the rejection should be reversed.

K. Is Claim 8 Anticipated by the Prior Art?

Again, there is nothing in any of the art that in any way could be remotely construed as anticipating claim 8.

Therefore, the rejection should be reversed.

L. Is Claim 9 Anticipated by the Prior Art?

Claim 9 calls for controlling operation of a media player in response to monitoring the watermark. Claim 9, which is dependent on claim 1, is not disclosed in any of the cited references. Again, there is no analysis of claim 9, but it is plain that there is nothing in any of the cited references that even reviewed mostly favorably to the Examiner could possibly support the rejection.

Therefore, the rejection should be reversed.

IX. CONCLUSION

Applicants respectfully request that each of the final rejections be reversed and that the claims subject to this Appeal be allowed to issue.

Respectfully submitted,

Date: October 20, 2003



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APPENDIX OF CLAIMS

The claims on appeal are:

1. A method comprising:
monitoring a watermark included with an advertisement;
accruing a credit after determining that the advertisement was played; and
associating an indication that an advertisement was played with an identifier for a particular user.
2. The method of claim 1 wherein accruing a credit includes allowing access to content.
3. The method of claim 1 wherein accruing a credit includes accruing a reward in return for playing the advertisement.
4. The method of claim 3 including accumulating rewards for successively playing advertisements.
5. The method of claim 1 wherein monitoring the watermark includes determining that the advertisement was played at a predetermined speed.
6. The method of claim 1 including monitoring the watermark included with a recorded advertisement.

7. The method of claim 1 wherein monitoring the watermark includes determining whether the advertisement was played at an intended time.

9. The method of claim 1 including controlling operation of a media player in response to monitoring the watermark.

11. An article comprising a medium storing instructions that, if executed, enable a processor-based system to:

monitor a watermark included with an advertisement;

accrue a credit after determining that the advertisement was played; and

associate an indication that an advertisement was played with an identifier for a particular user.

12. The article of claim 11 further storing instructions that, if executed, enable the processor-based system to allow access to content in return for playing the advertisement.

13. The article of claim 11 further storing instructions that, if executed, enable the processor-based system to accrue a reward in return for playing the advertisement.

14. The article of claim 13 further storing instructions that, if executed, enable the processor-based system to accumulate rewards for successively playing advertisements.

15. The article of claim 11 further storing instructions that, if executed, enable the processor-based system to determine that an advertisement was played at a predetermined speed.

16. The article of claim 11 further storing instructions that, if executed, enable the processor-based system to monitor the watermark included with a recorded advertisement.

17. The article of claim 11 further storing instructions that, if executed, enable the processor-based system to determine whether the advertisement was played at an intended time.

19. The article of claim 11 further storing instructions that, if executed, enable the processor-based system to control operation of a media player in response to monitoring the watermark.

21. A system comprising:
a processor-based device;
a media player coupled to said processor-based device; and
a watermark detector coupled to said media player, said watermark detector to detect a watermark included with an advertisement and to control operation of said media player in response to detection of the watermark.

22. The system of claim 21 further including a storage coupled to said device, said storage storing instructions that, if executed, enable the processor-based device to monitor the watermark included with the advertisement and accrue a credit after determining the advertisement was played.

23. The system of claim 22 wherein said storage stores instructions that, if executed, enable the device to allow access to content through said media player.

24. The system of claim 22 wherein said storage stores instructions that, if executed, enable the device to accrue a reward in return for playing the advertisement.

25. The system of claim 21 wherein said watermark detector determines whether an advertisement was played at a predetermined speed.

26. The system of claim 21 wherein said storage stores content for subsequent replay by said media player.

27. The method of claim 1 including determining that the advertisement was played, based on the watermark.

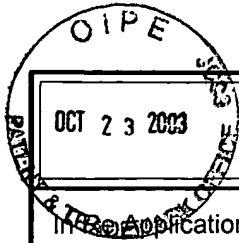
28. The article of claim 11 storing instructions that, if executed, enable the processor-based system to determine that the advertisement was played, based on the watermark.

29. A method comprising:
- monitoring a watermark included with an advertisement;
 - accruing a credit after determining that the advertisement was played; and
 - controlling operation of a media player in response to monitoring the watermark.

30. An article comprising:
- a medium storing instructions that, if executed, enable a processor-based system

to:

- monitor a watermark included with an advertisement;
- accrue a credit after determining that the advertisement was played; and
- control operation of a media player in response to monitoring the watermark.



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TRANSMITTAL OF APPEAL BRIEF (Large Entity)

Docket No.
ITL0482US

In Re Application Of: **Eric C. Hannah et al.**

Serial No.	Filing Date	Examiner	Group Art Unit
09/690,512	October 17, 2000	Stephen M. Gravini	3622

Invention: **Ensuring that Advertisements are Played**

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GROUP 3600

TO THE COMMISSIONER FOR PATENTS:

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on October 8, 2003.

The fee for filing this Appeal Brief is: **\$330.00**

- ☒ A check in the amount of the fee is enclosed.
- ☐ The Director has already been authorized to charge fees in this application to a Deposit Account.
- ☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **20-1504**

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Dated: October 20, 2003

I certify that this document and fee is being deposited on **10-20-03** with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Cynthia L. Hayden

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